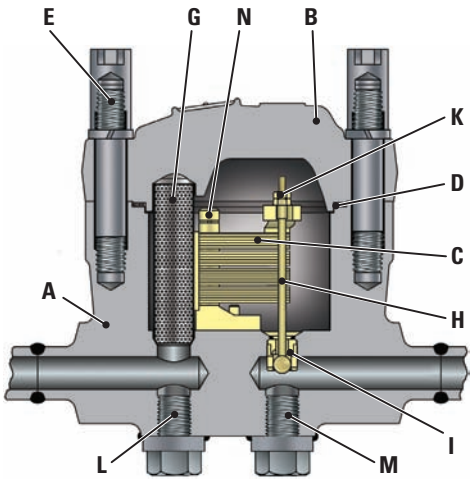
# VELAN FORGED HP/HT N2500–2600 STEAM TRAPS




## Type N2500/2600

## STANDARD MATERIALS

| PART | | MATERIALS |
|---|---|---|
| A | Body | Forged alloy steel F22, F91 |
| B | Cover | Same as body material |
| C | Bimetal element | Truflex GB-14 |
| D | Cover gasket | S/S 321 spiral wound with graphite filler |
| E | Cover stud(1) | Chrome moly. alloy |
| F | Cover nut(1) | Carbon steel, stainless steel |
| G | Strainer | Stainless steel |
| H | Stem and ball | SS, ball valve 58Rc |
| I | Seat | SS hardfaced Stellite 6 |
| J | Plug gasket | S/S 321 spiral wound with graphite filler |
| K | Adjusting nut and locknut | Stainless steel |
| L | Strainer blow down plug | Carbon steel or chrome moly. steel |
| M | Test plug | Carbon steel or chrome moly. steel |
| N | Fixing screw and washer | Stainless steel |

*(1) Durahete 1055 (F22), Nimonic 80A (F91), SB637 bolting for ANSI/ASME class 2500 shell.*

## APPLICATIONS

Type N steam traps resolve all problems with high pressure steam trapping on superheated steam lines in thermal power plants or aboard ships. Over 1,100 U.S. Navy ships have used Velan steam traps.

- Steam main drainage
- Turbine drains
- Desuperheater
- High pressure processing
- General high pressure/ temperature service

## CONNECTIONS

- Screwed
- Socketweld
- Buttweld
- Flanged

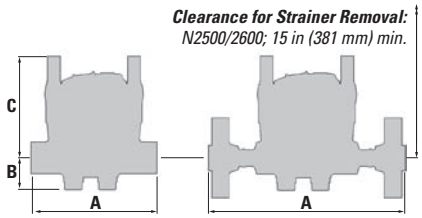
## ENGINEERING DATA

| PRESSURE RANGE (1) psi/bar | PMO psi/bar | MATERIAL | MAX TEMP °F/°C | ORIFICE in/mm | MAX CAPACITY lb/hr/kg/hr |
|---|---|---|---|---|---|
| 500-2500 (34.5-172) | 2500 (172) | F22 | 1050 565 | 5/16 8 | 4,800 2,182 |
| 500-2600 (34.5-179) | 2600 (179) | F91 | 1100 593 | | 4,900 2,227 |

*(1) Consult works for operating pressure below 500psi (34.5 bar).*

**Standard bolting: DURAHETE 1055 – F22, NIMONIC 80A – F91**
Maximum design condition: ANSI/ASME Class 1500
PMA = Maximum allowable pressure: 3750psi@100˚F (259bar.g@38˚C)
TMA = Maximum allowable temperature: 1050˚F (565˚C) – F22
1100˚F (593˚C) – F91
Maximum cold hydrostatic test pressure: 5625psi (388bar.g)
TMO = Maximum operating temperature = TMA
PMO = Maximum operating pressure: (See Table)

**Special bolting: SB637**
Maximum design condition: ANSI/ASME 2500
PMA = Maximum allowable pressure: 6250psi@100˚F (431bar.g@38˚C)
Maximum cold hydrostatic test pressure: 9375psi (647bar.g)

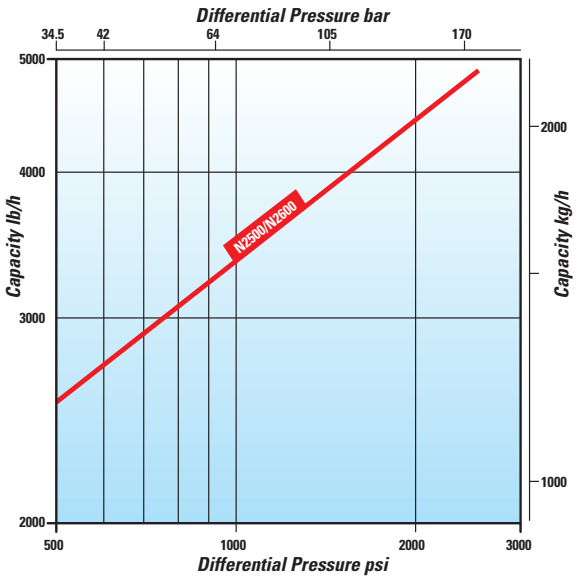



***Clearance for Strainer Removal:***
*N2500/2600; 15 in (381 mm) min.*

## DIMENSIONS & WEIGHTS

| SIZE in/mm | | | A FACE TO FACE SW | A FACE TO FACE BW | A FACE TO FACE FLG | B CENTER TO BOTTOM | C CENTER TO TOP | WEIGHT lb/kg SW | WEIGHT lb/kg BW | WEIGHT lb/kg FLG |
|---|---|---|---|---|---|---|---|---|---|---|
| 1/2 15 | 3/4 20 | 1 25 | 10 254 | 16 406 | 15 1/2 349 | 2 5/8 67 | 8 1/8 206 | 80 36 | 83 38 | 105 48 |

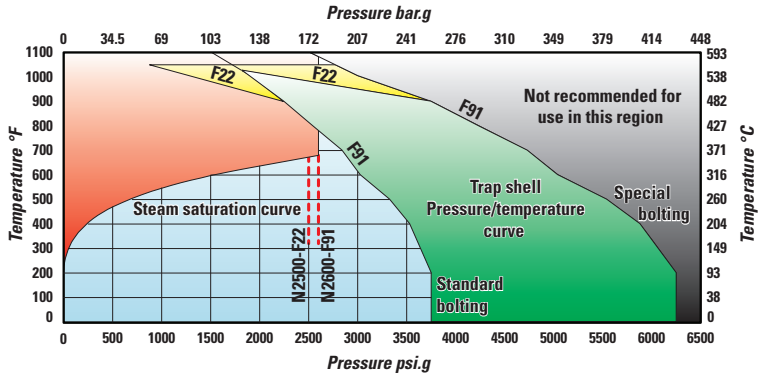
## CONDENSATE CAPACITY




***The performance graph*** *indicates the continuous discharge capacities of condensate per hour at various pressure differentials across the trap.*

*Maximum cold water capacity x 3.5*

## PRESSURE / TEMPERATURE LIMITS




---------- *Pressure limit for trap type*